

Receipt
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Practitioner's Docket No. 31162-1007UT

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Christopher J. Raymond

Application No.: 0 10/ 086,339

Group No.: 2877

Filed: February 28, 2002

Examiner: UNKNOWN

For: LINE PROFILE ASYMMETRY MEASUREMENT USING SCATTEROMETRY

Assistant Commissioner for Patents
Washington, D.C. 20231

REQUEST FOR CORRECTED FILING RECEIPT

1. Attached is a copy of the official filing receipt received from the PTO in the above application for which issuance of a corrected filing receipt is respectfully requested.

NOTE: The PTO will not correct the filing receipt until the application is complete (in other words, the applicant files a response to the notice to file missing parts).

2. There is an error with respect to the following data, which is:

☒ Incorrectly entered

and/or

☐ omitted.

Error in

1. ☐ Applicant's name
2. ☐ Applicant's address
3. ☒ Title
4. ☐ Filing Date
5. ☐ Application Number
6. ☐ Foreign/PCT Application Re:
7. ☐ Other

Correct data

- 1.
- 2.
3. LINE PROFILE ASYMMETRY MEASUREMENT USING
4. SCATTEROMETRY
- 5.
- 6.
- 7.

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. § 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☒ deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

FACSIMILE

☐ transmitted by facsimile to the Patent and Trademark Office.

Date: November 27, 2002

Signature

Jeffrey D. Myers

(type or print name of person certifying)

(Request for Corrected Filing Receipt [5-8]—page 1 of 2)



Attached for the Patent Office's reference is a copy of page 1 of the specification, page 1 of the Combined Declaration and Power of Attorney, and the Application Data Sheet, all of which clearly show the correct spelling of the title of the application.

3. *(complete the following applicable item)*

A. ☒ The correction(s) is/are not due to any error by applicant and no fee is due.

OR

B. ☐ At least one of the above corrections is due to applicant's error and the fee therefor, under 37 C.F.R. § 1.19(h), of \$25.00 is paid as follows:

☐ Enclosed is check for \$25.00.

☐ Charge Account _____ \$25.00.

Reg. No.: 35,964

Tel. No.: (505) 998-1502

Customer No.: 005179


SIGNATURE OF PRACTITIONER

Jeffrey D. Myers

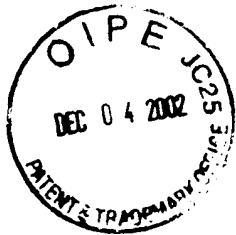
(type or print name of practitioner)

PEACOCK, MYERS & ADAMS, P.C.
P.O. Box 26927

P.O. Address

Albuquerque, New Mexico 87125-6927

(Request for Corrected Filing Receipt [5-8]—page 2 of 2)



Practitioner's Docket No. 31162-1007UT

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Christopher J. Raymond
Application No.: Ø 10/ 086,339 Group No.: 2877
Filed: February 28, 2002 Examiner: UNKNOWN
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Assistant Commissioner for Patents
Washington, D.C. 20231

**REQUEST FOR REPUBLICATION OF PATENT APPLICATION
PUBLICATION
(37 C.F.R. § 1.221(b))**

NOTE: "The Office will grant a request for a corrected or revised patent application publication . . . only when the Office makes a material mistake which is apparent from Office records. Any request for a corrected or revised patent application publication other than as provided in paragraph (a) of this section must be filed within two months from the date of the patent application publication. This period is not extendable." 37 C.F.R. § 1.221(b)

1. Applicant hereby requests republication of this application, which request is being made within two months of the publication which took place on October 17, 2002 (Date)
2. The material mistake which is apparent from the Office records is as follows:

There is a typographical error in the title of the application, in the word "measurement", which is misspelled as "measurment".

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory;
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37 C.F.R. § 1.8(a)

☒ with sufficient postage as first class mail.

37 C.F.R. § 1.10 *

☐ as "Express Mail Post Office to Addressee"

Mailing Label No. _____ (mandatory)

TRANSMISSION

☐ facsimile transmitted to the Patent and Trademark Office, (703) _____

Signature _____

Jeffrey D. Myers

(type or print name of person certifying)

Date: November 27 , 2002

Reg. No.: 35,964

Tel. No.: (505) 998-1502

Customer No.: 005179



SIGNATURE OF PRACTITIONER

Jeffrey D. Myers

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UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/086,339	02/28/2002	2877	816	31162-1007UT	9	26	2

05179
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CONFIRMATION NO. 4112

FILING RECEIPT



OC000000008426747

Date Mailed: 07/10/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Christopher J. Raymond, Albuquerque, NM;

Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/273,039 03/02/2001

Foreign Applications

If Required, Foreign Filing License Granted 05/24/2002

Projected Publication Date: 10/17/2002

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Line profile asymmetry measurment using scatterometry

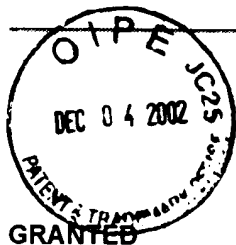
Preliminary Class

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JUL 15 2002

Peacock, Myers & Adams, PC

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**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



PATENT APPLICATION

LINE PROFILE ASYMMETRY MEASUREMENT USING SCATTEROMETRY

5 CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of the filing of U.S. Provisional Patent Application Serial No. 60/273,039, entitled "Process Qualification by the Measurement of Line Profile Asymmetry Using Scatterometry", filed on March 2, 2001, and the specification thereof is incorporated herein by reference.

10 BACKGROUND OF THE INVENTION

Field of the Invention (Technical Field):

The present invention relates to optical inspection of microelectronic devices, in particular measurement of line profile asymmetry using scatterometry.

15 Background Art:

Note that the following discussion refers to a number of publications by author(s) and year of publication, and that due to recent publication dates certain publications are not to be considered as prior art vis-a-vis the present invention. Discussion of such publications herein is given for more complete background and is not to be construed as an admission that such publications are prior art for
20 patentability determination purposes.

The fabrication of a microelectronic device is a complicated procedure that uses a variety of equipment for the different process steps involved. First, the lithography process transfers the image being made into a light sensitive material known as photoresist. This image in photoresist, in turn, acts
25 as a mask for the next patterning process known as etching. Etching is the process by which the resist image is transferred into a suitable material such as poly-silicon. Then the etched material is over-filled with some insulating materials, planarized if necessary, and the whole process begins again.

**COMBINED DECLARATION AND POWER OF ATTORNEY**

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL, CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type:

(check one applicable item below)

☒ original.☐ design.

NOTE: With the exception of a supplemental oath or declaration submitted in a reissue, a supplemental oath or declaration is not treated as an amendment under 37 CFR 1.312 (Amendments after allowance). M.P.E.P. § 714.16, 7th Edition.

☐ supplemental.

NOTE: If the declaration is for an International Application being filed as a divisional, continuation or continuation-in-part application, do not check next item; check appropriate one of last three items.

☐ national stage of PCT.

NOTE: If one of the following 3 items apply, then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR C-I-P.

NOTE: See 37 C.F.R. § 1.63(d) (continued prosecution application) for use of a prior nonprovisional application declaration in the continuation or divisional application being filed on behalf of the same or fewer of the inventors named in the prior application.

☐ divisional.☐ continuation.

NOTE: Where an application discloses and claims subject matter not disclosed in the prior application, or a continuation or divisional application names an inventor not named in the prior application, a continuation-in-part application must be filed under 37 C.F.R. § 1.53(b) (application filing requirements — nonprovisional application).

☐ continuation-in-part (C-I-P).**INVENTORSHIP IDENTIFICATION**

WARNING: If the inventors are each not the inventors of all the claims, an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTIONLINE PROFILE ASYMMETRY MEASUREMENT USING SCATTEROMETRY

(Declaration and Power of Attorney [1-1]—page 1 of 7)

APPLICATION DATA SHEET

Inventor Information

Inventor One Given Name::	Christopher J.
Family Name::	Raymond
Postal Address Line One::	4431 Sherre Drive, N.E.
City::	Albuquerque
State or Province::	NM
Postal or Zip Code::	87111
Citizenship Country::	USA

Correspondence Information

Correspondence Customer Number::	05179
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Application Information

Title Line One::	Line Profile Asymmetry Measurement Using
Title Line Two::	Scatterometry
Total Drawing Sheets::	9
Formal Drawings?::	No
Application Type::	Utility
Docket Number::	31162-1007UT

Representative Information

Registration Number::	005179
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Continuity Information

This application is a::	Non Prov. of Provisional
>Application One::	60/273,039
Filing Date::	03-02-2001